

equivalent to Claims.

While the invention has been described in detail  
and with reference to specific examples thereof, it will  
be apparent to one skilled in the art that various  
5 changes and modifications can be made therein without  
departing from the spirit and scope thereof.

The present application is based on Japanese  
Patent Application No. 2004-024257 filed on January 30,  
10 2004, and the contents are incorporated herein by  
reference.

#### Industrial Applicability

As described in the above, according to the  
15 invention, regardless of the frequency to be applied, a  
soft magnetic material exhibiting excellent magnetic  
characteristics and a dust core produced from the soft  
magnetic material can be provided.

Claims

1. A soft magnetic material comprising metal magnetic particles containing iron and oxygen, wherein  
5 the ratio of the above oxygen contained in the metal magnetic particles is more than 0 and is less than 0.05% by mass.

2. The soft magnetic material according to claim  
10 1, wherein the coercive force of the above metal magnetic particles is  $2.4 \times 10^2$  A/m or less.

3. The soft magnetic material according to claim  
15 1 or 2, wherein the average particle size of the above metal magnetic particles is from 100  $\mu\text{m}$  and to 300  $\mu\text{m}$ .

4. The soft magnetic material according to claim  
1 or 2, wherein the particle size distribution of the above metal magnetic particles is substantially present  
20 only in the range of more than 38  $\mu\text{m}$ .

5. The soft magnetic material according to  
claim 1 or 2, which comprises a plurality of composite magnetic particles comprising the above metal magnetic  
25 particles and insulating coated films surrounding the

surface of the above metal magnetic particles.

6. A dust core produced using the soft magnetic material according to claim 1 or 2.

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7. The dust core according to claim 6, wherein coercive force is  $2.0 \times 10^2$  A/m or less.